INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION

COMPLIANCE INSPECTION REPORT

Inspector Name Timothy A. Corn Date of Inspection 09/20/2011 Time 10:00 A Unit # 417 County Pike Date of Last Inspection 09/13/2011										
Inspection Type: PC (P, C, PC) See also 9/13/11 rept Operation Type: X Surface Processing Exploration Underground										
operation type										
Is This Inspection For Last Month? (Y/N) \underline{N}										
Mines/Permits with this Unit:										
X S-354 Peabody Midwest Mining, LLC - Somerville East Mine										
the contract of the contract o										
INSPECTION CHECKLIST: Indicate compliance code for items checked. Items marked (S) were										
satisfactory. For any items marked (X), provide a narrative to support this										
determination. Items marked (NA) are not applicable to this inspectable unit.										
S 1. Areas Permitted, Bonded, or Unsuitable.										
. Signs and Markers, Survey Corner Markers.										
NA_ 3. Operations, Coal Recovery, and Cessation of Operations. X 4. Backfilling and Grading, Contemporaneous Reclamation.										
X 5. Topsoil, Alternate Material, and Prime Farmland Handling.										
 X 6. Revegetation/Rills and Gullies, and Slides. X 7. Post-Mining Land Use, Fish and Wildlife Mitigation. 										
X 8. Hydrologic Balance.										
NA 9. Disposal of Coal/Non-Coal Waste, and Excess Spoil.										
NA 10. Auguring, Processing, and Steep Slopes.										
NA 11. Transportation and Support Facilities - Utility Install.										
12. Casing/Sealing Exposed Underground Openings.										
NA 13. Subsidence Control Prevention.										
S 14. Liability Insurance Expires 11/01/2011										
X 15. Bond Release Information.										
X 16. Other Permit and Site Conditions: NPDES #ING0040206 Water Monitoring										
S 17. Off-Site Impacts Noted (Y/N) N .										
(If yes, attach off-site impact form as COVER to this inspection.)										

Responsible Official & Address: Copy Issued To:										
Mr. Greg Olinger Not Issued on Site										
UMI, LLC CC: Peabody Midwest Mining, LLC										
P.O. Box 400 7100 Eagle Crest Blvd, Ste 100										
Huntingburg, IN 47542 Evansville, IN 47715										
7 - 1 0 0 2011										
Signature: Date: September 20, 2011										
Authorize Representative										
Division of Reclamation										

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Permittee Peabody Midwest Mining, LLC Signature of Co. Rep. Not Completed on Site Mine Somerville East Mine Unit # 417 County Pike Date of Insp. September 20, 2011 Time 10:00 AM

COMMENTS:

This inspection was conducted with United Minerals representative Terry Kissel and DNR field supervisor Kevin Geier to check on the eligibility of 9.9 acres for Phase I release (completion of grading), 29.3 acres for Phase II release (completion of revegetation), and 92.5 acres for Phase III release (final). DNR Fish & Wildlife biologist Ramona Briggeman was on the property on September 13, 2011 for the purpose of assessing the success of forest and fish & wildlife reclamation (see also the Compliance Report dated September 13, 2011). Ms Briggeman's comments, attached in full as page 6 of this report, are in agreement with the recommendations made concerning bond release for forest and fish & wildlife areas. A bond release inspection report will be issued at a later date.

- 4. Backfilling and Grading, Contemporaneous Reclamation.
- 5. Topsoil, Alternate Material, and Prime Farmland Handling.
- 6. Revegetation/Rills and Gullies, and Slides.
- 7. Post-Mining Land Use, Fish and Wildlife Mitigation
- 15. Bond Release Information.
 - A. Phase I, II, and III release **are recommended** as requested except for the terrace that connects Final Cut #1 to Triad's basin ASB35.
 - Erosion in this terrace channel continues to be problematic. United Minerals personnel have previously conveyed the idea that this terrace will be filled and the drainage from the neighboring Triad South Augusta Mine, Permit S-353, will be redirected to a reconstructed stream system within the S-354 affected area. This is to be completed once vegetation has become established and the stream channel has settled in.
 - In order for the terrace to be Phase II eligible, it must be stabilized, filled, graded, protected, and have vegetation reestablished.
 - B. Phase I sites are areas that were held out from previous releases. See also bond release reports dated 11/26/07, 2/17/09, and 5/28/10 for soil replacement depth documentation.
 - Backfilling and grading operations are complete, approximate original contours have been restored consistent with the approved plan of reclamation, and premining drainage patterns have been restored.
 - 2. All soils have been redistributed within the areas requested for bond release. Soil replacement was observed regularly during redistribution operations.

 Non-prime soil replacement depth consistently exceeded 3 feet.
 - C. The access roads are entrance points into the affected area from existing roads that predate the current mining operation. Roads are constructed with gravel and remain stable and functional.
 - D. Basins EL-27 and SE-6S make up the water land use for this release. These impoundments have been constructed and maintained in accordance with approved "as built" engineer certified designs. Basin SE-6S is not discharging. Water quality in this pond will be checked prior to release of the bond inspection report. See page 5 of this report for basin EL-17 water quality information.
 - E. The following text is consistent with Ms Briggeman's written comments for Forest and Fish & Wildlife land uses attached as page 6 of this report:
 - 1. The understory is stable with orchard grass, red top, perennial rye, red clover, partridge pea and annuals in the species mix. Mowing was recently completed between the rows of trees to reduce competition and mouse/vole cover

Signature

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COMMENTS:

while increasing litter for soil protection.

- 2. The Forest and Wildlife land uses are well vegetated with a mixture of tree and shrub species including various oak sp.(red, white, swamp white, bur), hickory, bald cypress, pecan, walnut, ninebark, sycamore, tulip poplar, sweetgum, dogwood, buttonbush, river birch, maple, pine, persimmon, and others.
 - a) Some volunteer species are also coming in, including cottonwood, willow, sycamore, maple and black locust.
 - b) Establishment and growth is good to very good throughout. Tree counts submitted with the bond release application indicate trees exceed the required 450 stems/acre with an actual tally of 471 stems per acre.

c) Trees have been in place for at least three growing seasons.

3. Wildlife areas are vegetated similarly to the forest areas. There is an area of warm season grass planted in switch grass.

- a) Stream reaches constructed within the FC #1 landscape appear to be developing well. Older streams are constructed with meanders, pools, riffles and other structures valuable in a wildlife land use. Piles of Rip rap remain for additional construction in adjacent areas when field conditions allow access. Concrete barriers also remain at the former entrance off SR 61 and near the outfall of Triad's Basin ASB35 if needed for additional stream construction.
- b) The lay of the vegetation in the main stream channel on the east side of SR 61 indicates some recent significant flows have been handled well. Erosion is minimal in part because heavier sediment has dropped out along the way creating smaller riffles that hold back water flow to a more sustained flow. Root balls positioned at stream bends are also doing a good job of minimizing erosion. Several smaller wetlands have formed along the stream path and behind restraining brush piles that are host to all manner of frogs, red wings, raptors, etc. Mud flats with cattails are also becoming established.
- c) Larger marshes exist as shallow water bodies with sedges, rushes, willows, cattails, cottonwoods, bald cypress and other wetland species along with some deeper water areas. There are some bare areas present at this time where the water has receded due to the extremely dry time of the year.
- d) Work has been completed over the last month or two to improve groundcover on spotty areas and sites where erosion had occurred. The repair crew has done a good job of locating and making repairs at erosion sites along the main stream channel.
- e) The outfall of basin SE-5S has been reworked to help contain erosion without impeding its function of extending stream flow after a rain event.
- F. Revisions reflecting the recommendations of this report need to be submitted by October 20, 2011.

8. Hydrologic Balance

16. Other Permit and Site Conditions: NPDES #ING0040206 Water Monitoring
A. A review of the available surface and ground water data on file with the Division

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Date September 20, 2011

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COMMENTS:

of Reclamation indicates contamination of surface and ground water resources by potentially acid/toxic forming materials has been avoided.

- B. Drill logs and other information included in the S-354 permit do not indicate the presence of any significant ground water resources within the permit area.
 - 1. What ground water resources that are present are monitored by means of one ground water well (GMM-1) through phase III release. Reports have been received up to and including April 2011.
 - 2. GWM-2 was monitored through July 2005 after which it was mined through by the adjoining Triad South Augusta mine (S-353). Restoration of this well is not required and data collection from this well is finished.
 - 3. Ground water monitoring for residential well #10 was concluded with the August 2009 report.
- C. Surface water is controlled through basins EL-27, EL-28, and NPDES outfalls at basins EL-22, SE-9S (aka Turkey Flight Lake), SE-12S, and EL-17 (phase II). Basins EL-27 and EL-28 are sediment control structures that have been shown to not discharge. All NPDES points are in reclamation status (quarterly).
 - 1. Reports for SE-9S, SE-12S, FC-2, EL-17, and EL-22 have been received through April 2011 ($2^{\rm nd}$ quarter). NPDES reports received to date indicate continuing compliance with Federal and State effluent limits.
 - 2. Each of the above named sediment ponds have been certified. Also, certifications of Salt Lick Lake, FC-2, FC-1, and basins SE-5S, SE-6S, SE-8S, SE-10S, SE-11S, and SE-13S (not NPDES points) have been submitted and approved. All impoundments are exempted from annual examination reporting requirements of 312 IAC 25-6-20(9)(E).
 - 3. Basin discharge observations have been entered in the table inserted as page 5 of this report.
- D. Two surface water stations, R-75 and R-66, are monitored quarterly through final bond release for total dissolved solids or specific conductance, total suspended solids, pH, total iron, total manganese, and flow.
 - 1. Reports for these stations have been received through April 2011.
 - The DoR Water Quality Specialist reviewed the stream data and determined that pre-mining surface water quality has not been compromised by the S-354 mining operation.

Signature Junethy a Com-Authorized Representative Date September 20, 2011

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COMMENTS:

16. Other Permit and Site Conditions: NPDES Water Monitoring.

NPDES PERMIT:									
SB/PI	NPDES	NPDES	Discharge	Flow rate	рH	Iron Mg/l	Settable solids	Insp Date	
NO . EL-17	Outfall EL17	Status ALK	Yes	M	7.5	< 1. 0	Nil	9/20/11	
EL-22	0228	ALK	Yes	T	7.0	< 1. 0	Nil	9/20/11	
SE-9S*	0098	ALK						*	
SE-12S	0128	ALK	No					9/20/11	
andanin'i ang paggana in tinang an in magamakan ng paggana akan tan									

		Status: UND ALK ACID DROP	Discharge: Yes No	Flow: Trickle (T) Low (L) Moderate(M) High (H)					

^{*}The outfall at 009S was inaccessible due to field conditions. This impoundment will be checked and this form updated prior to closure of this release.

Authorized Representative Division of Reclamation

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COMMENTS:

Memorandum

To: Tim Corn

From: Ramona Briggeman

Date: 9/13/2011

e: Somerville East Bond release S-354 Fall 2011(Forest and wildlife land use)

4.3 acres forest and 16.7 acres wildlife are requested for Phase II Revegetation release.

8.9 acres forest and 78.6 acres wildlife are requested for Phase III Final release

The Forest and Wildlife land uses are well vegetated with a mixture of tree and shrub species including various different oak sp.(red, white, swamp white, bur), hickory, bald cypress, pecan, walnut, ninebark, sycamore, tulip poplar, sweetgum, dogwood, buttonbush river birch, maple, pine, persimmon and others. Some volunteers species are also coming in including cottonwood, willow, sycamore, maple and black locust. The understory appears stable. The understory contains red top, orchard grass, perennial rye, red clover, partridge pea and annuals. Wildlife areas are generally vegetated similarly to the forest areas. There is an area of warm season grass plantings containing switch grass. Some smaller replaced stream reaches are part of the wildlife land use. Stream reaches have been replaced within the landscape. They appear to be developing well and have been constructed with meanders, pools, riffles and other structures valuable in a wildlife land use. Marshes exist as shallow seasonally inundated water bodies with sedges, rushes, willows, cattails, cottonwoods, sycamore, sweet gum and other wetland species along with some deeper water areas. There are some bare areas present at this time where the water has receded due to the extremely dry time of the year.

Ground cover consists of grasses legumes and annuals adequate for forest and/or wildlife land use. The area has been reclaimed in accordance with the approved plan of reclamation. Tree counts indicate 471.43 trees/acre which exceeds the required 450 stems/acre. Trees have been in place for at least three growing seasons. Revegetation phase II release and final Phase III release is recommended for forest and wildlife areas.

Signature

Authorized Representative Division of Reclamation

Division of Reclam state form 4899

Date September 20, 2011